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Sequence Listing was accepted.

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Reviewer: Anne Corrigan

Timestamp: Thu Oct 04 17:29:58 EDT 2007

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Application No: 10579006 Version No: 1.1

Input Set:

Output Set:

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Finished: 2007-10-04 17:29:12.342  
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 601 ms  
Total Warnings: 3  
Total Errors: 0  
No. of SeqIDs Defined: 8  
Actual SeqID Count: 8

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (3)

# SEQUENCE LISTING

<110> MCINNES, CAMPBELL  
MCLACHLAN, JANICE  
MEZNA, MOKDAD  
FISCHER, PETER

<120> METHOD FOR IDENTIFYING INHIBITORS USING A HOMOLOGY  
MODEL OF POLO-LIKE KINASE 1

<130> CCI-067US

<140> 10579006

<141> 2006-05-11

<150> PCT/GB04/004762

<151> 2004-11-12

<150> GB 0326396.9

<151> 2003-11-12

<160> 8

<170> PatentIn Ver. 3.3

<210> 1

<211> 19

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 1

Met Ser Tyr Tyr His His His His His His Gly Met Ala Ser Asp Asp  
1 5 10 15

Asp Asp Lys

<210> 2

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic 6x  
His tag

<400> 2

His His His His His His  
1 5

<210> 3

<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Synthetic  
peptide

<400> 3  
Arg Arg Arg Glu Glu Glu Thr Glu Glu Glu  
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<210> 4  
<211> 603  
<212> PRT  
<213> Homo sapiens

<400> 4  
Met Ser Ala Ala Val Thr Ala Gly Lys Leu Ala Arg Ala Pro Ala Asp  
1 5 10 15  
Pro Gly Lys Ala Gly Val Pro Gly Val Ala Ala Pro Gly Ala Pro Ala  
20 25 30  
Ala Ala Pro Pro Ala Lys Glu Ile Pro Glu Val Leu Val Asp Pro Arg  
35 40 45  
Ser Arg Arg Arg Tyr Val Arg Gly Arg Phe Leu Gly Lys Gly Gly Phe  
50 55 60  
Ala Lys Cys Phe Glu Ile Ser Asp Ala Asp Thr Lys Glu Val Phe Ala  
65 70 75 80  
Gly Lys Ile Val Pro Lys Ser Leu Leu Leu Lys Pro His Gln Arg Glu  
85 90 95  
Lys Met Ser Met Glu Ile Ser Ile His Arg Ser Leu Ala His Gln His  
100 105 110  
Val Val Gly Phe His Gly Phe Phe Glu Asp Asn Asp Phe Val Phe Val  
115 120 125  
Val Leu Glu Leu Cys Arg Arg Arg Ser Leu Leu Glu Leu His Lys Arg  
130 135 140  
Arg Lys Ala Leu Thr Glu Pro Glu Ala Arg Tyr Tyr Leu Arg Gln Ile  
145 150 155 160  
Val Leu Gly Cys Gln Tyr Leu His Arg Asn Arg Val Ile His Arg Asp  
165 170 175  
Leu Lys Leu Gly Asn Leu Phe Leu Asn Glu Asp Leu Glu Val Lys Ile  
180 185 190  
Gly Asp Phe Gly Leu Ala Thr Lys Val Glu Tyr Asp Gly Glu Arg Lys  
195 200 205

Lys Thr Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu Ser  
 210 215 220

Lys Lys Gly His Ser Phe Glu Val Asp Val Trp Ser Ile Gly Cys Ile  
 225 230 235 240

Met Tyr Thr Leu Leu Val Gly Lys Pro Pro Phe Glu Thr Ser Cys Leu  
 245 250 255

Lys Glu Thr Tyr Leu Arg Ile Lys Lys Asn Glu Tyr Ser Ile Pro Lys  
 260 265 270

His Ile Asn Pro Val Ala Ala Ser Leu Ile Gln Lys Met Leu Gln Thr  
 275 280 285

Asp Pro Thr Ala Arg Pro Thr Ile Asn Glu Leu Leu Asn Asp Glu Phe  
 290 295 300

Phe Thr Ser Gly Tyr Ile Pro Ala Arg Leu Pro Ile Thr Cys Leu Thr  
 305 310 315 320

Ile Pro Pro Arg Phe Ser Ile Ala Pro Ser Ser Leu Asp Pro Ser Asn  
 325 330 335

Arg Lys Pro Leu Thr Val Leu Asn Lys Gly Leu Glu Asn Pro Leu Pro  
 340 345 350

Glu Arg Pro Arg Glu Lys Glu Glu Pro Val Val Arg Glu Thr Gly Glu  
 355 360 365

Val Val Asp Cys His Leu Ser Asp Met Leu Gln Gln Leu His Ser Val  
 370 375 380

Asn Ala Ser Lys Pro Ser Glu Arg Gly Leu Val Arg Gln Glu Glu Ala  
 385 390 395 400

Glu Asp Pro Ala Cys Ile Pro Ile Phe Trp Val Ser Lys Trp Val Asp  
 405 410 415

Tyr Ser Asp Lys Tyr Gly Leu Gly Tyr Gln Leu Cys Asp Asn Ser Val  
 420 425 430

Gly Val Leu Phe Asn Asp Ser Thr Arg Leu Ile Leu Tyr Asn Asp Gly  
 435 440 445

Asp Ser Leu Gln Tyr Ile Glu Arg Asp Gly Thr Glu Ser Tyr Leu Thr  
 450 455 460

Val Ser Ser His Pro Asn Ser Leu Met Lys Lys Ile Thr Leu Leu Lys  
 465 470 475 480

Tyr Phe Arg Asn Tyr Met Ser Glu His Leu Leu Lys Ala Gly Ala Asn  
 485 490 495

Ile Thr Pro Arg Glu Gly Asp Glu Leu Ala Arg Leu Pro Tyr Leu Arg  
 500 505 510

Thr Trp Phe Arg Thr Arg Ser Ala Ile Ile Leu His Leu Ser Asn Gly  
 515 520 525

Ser Val Gln Ile Asn Phe Phe Gln Asp His Thr Lys Leu Ile Leu Cys  
 530 535 540

Pro Leu Met Ala Ala Val Thr Tyr Ile Asp Glu Lys Arg Asp Phe Arg  
 545 550 555 560

Thr Tyr Arg Leu Ser Leu Leu Glu Glu Tyr Gly Cys Cys Lys Glu Leu  
 565 570 575

Ala Ser Arg Leu Arg Tyr Ala Arg Thr Met Val Asp Lys Leu Leu Ser  
 580 585 590

Ser Arg Ser Ala Ser Asn Arg Leu Lys Ala Ser  
 595 600

<210> 5  
 <211> 685  
 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Met Glu Leu Leu Arg Thr Ile Thr Tyr Gln Pro Ala Ala Ser Thr Lys  
 1 5 10 15

Met Cys Glu Gln Ala Leu Gly Lys Gly Cys Gly Ala Asp Ser Lys Lys  
 20 25 30

Lys Arg Pro Pro Gln Pro Pro Glu Glu Ser Gln Pro Pro Gln Ser Gln  
 35 40 45

Ala Gln Val Pro Pro Ala Ala Pro His His His His His His Ser His  
 50 55 60

Ser Gly Pro Glu Ile Ser Arg Ile Ile Val Asp Pro Thr Thr Gly Lys  
 65 70 75 80

Arg Tyr Cys Arg Gly Lys Val Leu Gly Lys Gly Gly Phe Ala Lys Cys  
 85 90 95

Tyr Glu Met Thr Asp Leu Thr Asn Asn Lys Val Tyr Ala Ala Lys Ile  
 100 105 110

Ile Pro His Ser Arg Val Ala Lys Pro His Gln Arg Glu Lys Ile Asp  
 115 120 125

Lys Glu Ile Glu Leu His Arg Ile Leu His His Lys His Val Val Gln  
 130 135 140

Phe Tyr His Tyr Phe Glu Asp Lys Glu Asn Ile Tyr Ile Leu Leu Glu  
 145 150 155 160

Tyr Cys Ser Arg Arg Ser Met Ala His Ile Leu Lys Ala Arg Lys Val

				165				170				175			
Leu	Thr	Glu	Pro	Glu	Val	Arg	Tyr	Tyr	Leu	Arg	Gln	Ile	Val	Ser	Gly
180				185				190							
Leu	Lys	Tyr	Leu	His	Glu	Gln	Glu	Ile	Leu	His	Arg	Asp	Leu	Lys	Leu
195				200				205							
Gly	Asn	Phe	Phe	Ile	Asn	Glu	Ala	Met	Glu	Leu	Lys	Val	Gly	Asp	Phe
210				215				220							
Gly	Leu	Ala	Ala	Arg	Leu	Glu	Pro	Leu	Glu	His	Arg	Arg	Arg	Thr	Ile
225				230				235				240			
Cys	Gly	Thr	Pro	Asn	Tyr	Leu	Ser	Pro	Glu	Val	Leu	Asn	Lys	Gln	Gly
245				250				255							
His	Gly	Cys	Glu	Ser	Asp	Ile	Trp	Ala	Leu	Gly	Cys	Val	Met	Tyr	Thr
260				265				270							
Met	Leu	Leu	Gly	Arg	Pro	Pro	Phe	Glu	Thr	Thr	Asn	Leu	Lys	Glu	Thr
275				280				285							
Tyr	Arg	Cys	Ile	Arg	Glu	Ala	Arg	Tyr	Thr	Met	Pro	Ser	Ser	Leu	Leu
290				295				300							
Ala	Pro	Ala	Lys	His	Leu	Ile	Ala	Ser	Met	Leu	Ser	Lys	Asn	Pro	Glu
305				310				315				320			
Asp	Arg	Pro	Ser	Leu	Asp	Asp	Ile	Ile	Arg	His	Asp	Phe	Phe	Leu	Gln
325				330				335							
Gly	Phe	Thr	Pro	Asp	Arg	Leu	Ser	Ser	Ser	Cys	Cys	His	Thr	Val	Pro
340				345				350							
Asp	Phe	His	Leu	Ser	Ser	Pro	Ala	Lys	Asn	Phe	Phe	Lys	Lys	Ala	Ala
355				360				365							
Ala	Ala	Leu	Phe	Gly	Gly	Lys	Lys	Asp	Lys	Ala	Arg	Tyr	Ile	Asp	Thr
370				375				380							
His	Asn	Arg	Val	Ser	Lys	Glu	Asp	Glu	Asp	Ile	Tyr	Lys	Leu	Arg	His
385				390				395				400			
Asp	Leu	Lys	Lys	Thr	Ser	Ile	Thr	Gln	Gln	Pro	Ser	Lys	His	Arg	Thr
405				410				415							
Asp	Glu	Glu	Leu	Gln	Pro	Pro	Thr	Thr	Thr	Val	Ala	Arg	Ser	Gly	Thr
420				425				430							
Pro	Ala	Val	Glu	Asn	Lys	Gln	Gln	Ile	Gly	Asp	Ala	Ile	Arg	Met	Ile
435				440				445							
Val	Arg	Gly	Thr	Leu	Gly	Ser	Cys	Ser	Ser	Ser	Ser	Glu	Cys	Leu	Glu
450				455				460							
Asp	Ser	Thr	Met	Gly	Ser	Val	Ala	Asp	Thr	Val	Ala	Arg	Val	Leu	Arg

465		470		475		480
Gly Cys Leu Glu Asn Met Pro Glu Ala Asp Cys Ile Pro Lys Glu Gln						
	485		490		495	
Leu Ser Thr Ser Phe Gln Trp Val Thr Lys Trp Val Asp Tyr Ser Asn						
	500		505		510	
Lys Tyr Gly Phe Gly Tyr Gln Leu Ser Asp His Thr Val Gly Val Leu						
	515		520		525	
Phe Asn Asn Gly Ala His Met Ser Leu Leu Pro Asp Lys Lys Thr Val						
	530		535		540	
His Tyr Tyr Ala Glu Leu Gly Gln Cys Ser Val Phe Pro Ala Thr Asp						
545		550		555		560
Ala Pro Glu Gln Phe Ile Ser Gln Val Thr Val Leu Lys Tyr Phe Ser						
	565		570		575	
His Tyr Met Glu Glu Asn Leu Met Asp Gly Gly Asp Leu Pro Ser Val						
	580		585		590	
Thr Asp Ile Arg Arg Pro Arg Leu Tyr Leu Leu Gln Trp Leu Lys Ser						
	595		600		605	
Asp Lys Ala Leu Met Met Leu Phe Asn Asp Gly Thr Phe Gln Val Asn						
	610		615		620	
Phe Tyr His Asp His Thr Lys Ile Ile Ile Cys Ser Gln Asn Glu Glu						
625		630		635		640
Tyr Leu Leu Thr Tyr Ile Asn Glu Asp Arg Ile Ser Thr Thr Phe Arg						
	645		650		655	
Leu Thr Thr Leu Leu Met Ser Gly Cys Ser Ser Glu Leu Lys Asn Arg						
	660		665		670	
Met Glu Tyr Ala Leu Asn Met Leu Leu Gln Arg Cys Asn						
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<210> 6  
 <211> 646  
 <212> PRT  
 <213> Homo sapiens

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Met Glu Pro Ala Ala Gly Phe Leu Ser Pro Arg Pro Phe Gln Arg Thr
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Ala Ala Ala Thr Ala Pro Pro Ala Gly Pro Gly Pro Pro Pro Ser Ala
20 25 30
Leu Arg Gly Pro Glu Leu Glu Met Leu Ala Gly Leu Pro Thr Ser Asp
35 40 45



Pro Gly Arg Leu Ile Thr Asp Pro Arg Ser Gly Arg Thr Tyr Leu Lys  
 50 55 60

Gly Arg Leu Leu Gly Lys Gly Gly Phe Ala Arg Cys Tyr Glu Ala Thr  
 65 70 75 80

Asp Thr Glu Thr Gly Ser Ala Tyr Ala Val Lys Val Ile Pro Gln Ser  
 85 90 95

Arg Val Val Lys Pro His Gln Arg Glu Lys Ile Leu Asn Glu Ile Glu  
 100 105 110

Leu His Arg Asp Leu Gln His Arg His Ile Val Arg Phe Ser His His  
 115 120 125

Phe Glu Asp Ala Asp Asn Ile Tyr Ile Phe Leu Glu Leu Cys Ser Arg  
 130 135 140

Lys Ser Leu Ala His Ile Trp Lys Ala Arg His Thr Leu Leu Glu Pro  
 145 150 155 160

Glu Val Arg Tyr Tyr Leu Arg Gln Ile Leu Ser Gly Leu Lys Tyr Leu  
 165 170 175

His Gln Arg Gly Ile Leu His Arg Asp Leu Lys Leu Gly Asn Phe Phe  
 180 185 190

Ile Thr Glu Asn Met Glu Leu Lys Val Gly Asp Phe Gly Leu Ala Ala  
 195 200 205

Arg Leu Glu Pro Pro Glu Gln Arg Lys Lys Thr Ile Cys Gly Thr Pro  
 210 215 220

Asn Tyr Val Ala Pro Glu Val Leu Leu Arg Gln Gly His Gly Pro Glu  
 225 230 235 240

Ala Asp Val Trp Ser Leu Gly Cys Val Met Tyr Thr Leu Leu Cys Gly  
 245 250 255

Ser Pro Pro Phe Glu Thr Ala Asp Leu Lys Glu Thr Tyr Arg Cys Ile  
 260 265 270

Lys Gln Val His Tyr Thr Leu Pro Ala Ser Leu Ser Leu Pro Ala Arg  
 275 280 285

Gln Leu Leu Ala Ala Ile Leu Arg Ala Ser Pro Arg Asp Arg Pro Ser  
 290 295 300

Ile Asp Gln Ile Leu Arg His Asp Phe Phe Thr Lys Gly Tyr Thr Pro  
 305 310 315 320

Asp Arg Leu Pro Ile Ser Ser Cys Val Thr Val Pro Asp Leu Thr Pro  
 325 330 335

Pro Asn Pro Ala Arg Ser Leu Phe Ala Lys Val Thr Lys Ser Leu Phe  
 340 345 350

Val	Arg	Lys	Lys	Lys	Ser	Lys	Asn	His	Ala	Gln	Glu	Arg	Asp	Glu	Val	355	360	365	
Ser	Gly	Leu	Val	Ser	Gly	Leu	Met	Arg	Thr	Ser	Val	Gly	His	Gln	Asp	370	375	380	
Ala	Arg	Pro	Glu	Ala	Pro	Ala	Ala	Ser	Gly	Pro	Ala	Pro	Val	Ser	Leu	385	390	395	400
Val	Glu	Thr	Ala	Pro	Glu	Asp	Ser	Ser	Pro	Arg	Gly	Thr	Leu	Ala	Ser	405	410	415	
Ser	Gly	His	Gly	Phe	Glu	Glu	Gly	Leu	Thr	Val	Ala	Thr	Val	Val	Glu	420	425	430	
Ser	Ala	Leu	Cys	Ala	Leu	Arg	Asn	Cys	Ile	Ala	Phe	Met	Pro	Pro	Ala	435	440	445	
Glu	Gln	Asn	Pro	Ala	Pro	Leu	Ala	Gln	Pro	Glu	Pro	Leu	Val	Trp	Phe	450	455	460	
Ser	Glu	Trp	Val	Gly	Phe	Ser	Asn	Lys	Phe	Gly	Phe	Gly	Tyr	Gln	Leu	465	470	475	480
Ser	Ser	Arg	Arg	Val	Ala	Val	Leu	Phe	Asn	Asp	Gly	Thr	His	Met	Ala	485	490	495	
Leu	Ser	Ala	Asn	Arg	Lys	Thr	Val	His	Tyr	Asn	Pro	Thr	Ser	Thr	Lys	500	505	510	
His	Phe	Ser	Phe	Ser	Val	Gly	Ala	Val	Arg	Arg	Ala	Leu	Gln	Pro	Gln	515	520	525	
Leu	Gly	Ile	Leu	Arg	Tyr	Phe	Ala	Ser	Tyr	Met	Glu	Gln	His	Leu	Met	530	535	540	
Lys	Gly	Gly	Asp	Leu	Pro	Ser	Val	Glu	Glu	Val	Glu	Val	Pro	Ala	Pro	545	550	555	560
Pro	Leu	Leu	Leu	Gln	Trp	Val	Lys	Thr	Asp	Gln	Ala	Leu	Leu	Met	Leu	565	570	575	
Phe	Ser	Asp	Gly	Thr	Val	Gln	Val	Asn	Phe	Tyr	Gly	Asp	His	Thr	Lys	580	585	590	
Leu	Ile	Leu	Ser	Gly	Trp	Glu	Pro	Leu	Leu	Val	Thr	Phe	Val	Ala	Arg	595	600	605	
Asn	Arg	Ser	Ala	Cys	Thr	Tyr	Leu	Ala	Ser	His	Leu	Arg	Gln	Leu	Gly	610	615	620	
Cys	Ser	Pro	Asp	Leu	Arg	Gln	Arg	Leu	Arg	Tyr	Ala	Leu	Arg	Leu	Leu	625	630	635	640
Arg	Asp	Arg	Ser	Pro	Ala											645			

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<211> 326  
<212> PRT  
<213> Homo sapiens

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Met Ser Ala